Recovery Plan Action Status

Plan Name: Recovery Plan for the Northern Idaho Ground Squirrel

Plan Status: Final Plan Date: 16-Sep-03 Lead Agency: USFWS

Lead Office Idaho Fish And Wildlife Office 378-5243)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	1	1.1.1.1.1	Habitat restoration - thinning (\$80/acre)	Ongoing Current	FY 2000 - FY 2004		Payette National Forest	Work type not yet selected	Labor type not yet selected	
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	1	1.1.1.1.2	Habitat restoration - burning (\$150/acre)	Ongoing Current	FY 2000 - FY 2004		Payette National Forest	Work type not yet selected	Labor type not yet selected	
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	1	1.1.1.2	Habitat restoration - reseeding (\$300/acre)	Unknown			Payette National Forest	Work type not yet selected	Labor type not yet selected	
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	1	1.1.1.3	Habitat restoration - livestock management (\$100/acre)	Ongoing Not Current	FY 2000 - FY 2004		Payette National Forest	Work type not yet selected	Labor type not yet selected	
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	1	1.1.2.1	Habitat maintenance - prescribed re-burns (\$50/acre)	Ongoing Current	FY 2000 - FY 2004		Payette National Forest	Work type not yet selected	Labor type not yet selected	
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	1	1.1.2.2	Habitat maintenance - vegetation management (e.g. noxious weed control)	Ongoing Not Current	FY 2000 - FY 2004		Payette National Forest	Work type not yet selected	Labor type not yet selected	
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	1	1.1.2.3	Habitat maintenance - grazing regimes	Ongoing Not Current	FY 2000 - FY 2004		Payette National Forest	Work type not yet selected	Labor type not yet selected	Combined with Action 1.1.1.3
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	2	1.1.3	Review and renew USFWS/PNF MOU	Obsolete			U.S. Fish and Wildlife Service, Payette National Forest	Work type not yet selected	Labor type not yet selected	Renew in FY 2006.

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Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	2	1.2	Habitat restoration on private lands and HCPs	Ongoing Current	FY 2000 - FY 2004		Idaho Department of Fish and Game, U.S. Fish and Wildlife Service	Management: Habitat Maintenance and Manipulation, Management: Land Use	Labor type not yet selected	
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	2	1.2.2	Monitor Safe Harbor Agreements	Ongoing Current	FY 2000 - FY 2004		Idaho Department of Fish and Game, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	1	1.3	Develop site- specific management plans for each metapopulation	Partially Complete	FY 2000 - FY 2004		Idaho Department of Fish and Game, Boise Zoo, Idaho, U.S. Fish and Wildlife Service, Payette National Forest	Management: Planning	Species Expert	Lost Valley Reservoir Plan has been completed; plan guides site specific recovery actions. Development of other site-specific plans on hold due to other actions deemed priority for recovery.
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	1	2.1	Develop a translocation plan - population genetics management	Obsolete	FY 2000 - FY 2004		Idaho Department of Fish and Game, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	currently translocation not considered a viable or necessary recovery action.
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	1	2.1.1	Translocate into existing populations	Obsolete	FY 2000 - FY 2004		Idaho Department of Fish and Game, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	Currently translocation not considered a viable or priority recovery action.
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	1	2.2.1	Develop a reintroduction plan	Obsolete			Idaho Department of Fish and Game, U.S. Fish and Wildlife Service, Payette National Forest	Work type not yet selected	Labor type not yet selected	translocation and reintroduction currently not considered a viable or priority recovery action.
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	1	2.2.2	Implement reintroductions	Obsolete			Idaho Department of Fish and Game, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	translocation and reintroductions currently not considered viable or priority recovery actions.
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	1	2.3	Captive propagation	Obsolete			Idaho Department of Fish and Game, Boise Zoo, Idaho, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	Captive propogation not considered viable or necessary recovery action at this time.

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Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	2	2.4.1.1	Conduct habitat research - nutrient cycling (post-fire succession)	Ongoing Current	FY 2010		Idaho Department of Fish and Game, U.S. Fish and Wildlife Service, Payette National Forest	Work type not yet selected	Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert	Habitat efficacy study includes pre- and post-fire treatment work initiatied spring 2010. Cost includes other elements of study.
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	2	2.4.1.2	Conduct habitat research - fire regime at each site	Ongoing Current	FY 2010		Idaho Department of Fish and Game, U.S. Fish and Wildlife Service, Payette National Forest	Work type not yet selected	Graduate Student	See action 2.4.1.1. Fire regime will be a part of the study.
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	2	2.4.1.3	Conduct habitat research - Effects of livestock grazing	Not Started			U.S. Fish and Wildlife Service, Payette National Forest	Work type not yet selected	Labor type not yet selected	
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	2	2.4.2.1	conduct squirrel ecology research - diet and nutrition	Partially Complete			Idaho Department of Fish and Game, U.S. Fish and Wildlife Service, Payette National Forest	Work type not yet selected	Contract, Species Expert	Pilot diet study started in 2008, additional funding likely in 2011 to continue study and expand sample size.
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	1	2.4.2.2	Conduct squirrel ecology research - overwinter survival (weather, supplemental feeding, hibernaculum, etc.)	Not Started			Idaho Department of Fish and Game, U.S. Fish and Wildlife Service, Payette National Forest	Work type not yet selected	Labor type not yet selected	Graduate study
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	3	2.4.2.3	Conduct squirrel ecology research - diseases (plague)	Not Started			Idaho Department of Fish and Game, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	Parasite collection incidental to actions 2.4.2.1 and 2.4.2.2
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	3	2.4.2.4	Conduct squirrel ecology research - contaminants	Not Started			Idaho Department of Fish and Game, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	Gopher control still on-going on the PNF. May be pesticide use on private land within or adjacent to PNF.
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	2	2.4.2.5	Conduct Squirrel ecology research - dispersal	Ongoing Current			Idaho Department of Fish and Game, U.S. Fish and Wildlife Service, Payette National Forest	Research: Other Information	Labor type not yet selected	Radio telemetry study initiated in FY 2011 to investigate NIDGS movement responses to habitat treatments. Additional work planned for FY 2012.

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Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	2	2.4.3.1	Population genetics studies - genetics and dispersal	Complete	FY 2000 - FY 2004	FY 2008	Idaho Department of Fish and Game, U.S. Fish and Wildlife Service	Research: Taxonomic Studies	Graduate Student	Linked to Actions 2.4.1 and 2.4.2. FWS provided funds to University of Idaho in support of a study of the systematics and landscape genetics of NIDGS. Hoisington Thesis- 2007.
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	2	2.4.3.2	Population genetics studies - estimation of population sizes	Not Started				Work type not yet selected	Labor type not yet selected	Linked to Actions 2.4.1 and 2.4.2
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	3	2.4.3.3	Population genetics studies - captive breeding	Not Started			Idaho Department of Fish and Game, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	Linked to Actions 2.4.1 and 2.4.2
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	2	2.4.3.4	Population genetics studies - evaluation of translocation techniques	Complete	FY 2000 - FY 2004	FY 2010	Idaho Department of Fish and Game, U.S. Fish and Wildlife Service	Work type not yet selected	Graduate Student	Linked to Actions 2.4.1 and 2.4.2; graduate studies by Katie Buscher and Jess Hoisington. Theses completed.
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	2	2.5.1	Law enforcement - Recreational shooting	Ongoing Current	FY 2000 - FY 2004		Idaho Department of Fish and Game, U.S. Fish and Wildlife Service, Payette National Forest	Work type not yet selected	Labor type not yet selected	
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	1	2.5.2	Law enforcement - enforcement of existing PNF regulations	Ongoing Current	FY 2000 - FY 2004		Payette National Forest	Work type not yet selected	Labor type not yet selected	Travel plan. Cost linked to Action 2.5.1
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	3	2.6	Predator management	Ongoing Current	FY 2000 - FY 2004		Idaho Department of Fish and Game, U.S. Fish and Wildlife Service, Payette National Forest	Work type not yet selected	Labor type not yet selected	Local as needed
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	3	2.7	Competitor management	Ongoing Not Current	FY 2000 - FY 2004		Idaho Department of Fish and Game, U.S. Fish and Wildlife Service, Payette National Forest	Work type not yet selected	Labor type not yet selected	Efforts to control Columbian ground squirrel may be reinitiated, but actual impact of Columbian ground squirrels as a competitor to NIDGS unknown at this time.

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Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	1	3.1.1	Habitat monitoring - establish vegetation plots and transects	Ongoing Current	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Payette National Forest	Work type not yet selected	Labor type not yet selected	During FY 2009, the USFWS provided funding to the Payette NF and IDFG to evaluate the efficacy of habitat treatments on FS lands. In addition, Payette NF conducts annual range monitoring within certain NIDGS areas.
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	1	3.1.2	Habitat monitoring - monitor outcome of treatments	Ongoing Current	FY 2000 - FY 2004		Idaho Department of Fish and Game, U.S. Fish and Wildlife Service, Payette National Forest	Work type not yet selected	Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert	Habitat treatment efficacy study initiated in spring 2010 includes habitat monitoring post-treatment for both thinning and controlled burning efforts. Also see action 2.4.1.
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	2	3.2.1	Ground squirrel monitoring - refine standard protocols for metapopulation monitoring	Ongoing Current	FY 2006		Idaho Department of Fish and Game, U.S. Fish and Wildlife Service	Management: Other	Contract, Internal Technical Assistance	Large population sampling. In 2006 3 GPRA actions: convened a population genetics workshop with Nationally recognized squirrel biologists, and initiated Round Valley and Lick Crk Surveys.
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	1	3.2.2	Ground squirrel monitoring - monitor annual population size and trajectory	Ongoing Current	FY 2000 - FY 2004		Idaho Department of Fish and Game, U.S. Fish and Wildlife Service	Work type not yet selected	Contract, Internal Field Assistance, Internal Technical Assistance, Species Expert	Linked to other actions
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	1	3.2.3	Ground squirrel monitoring - monitor prehibernation and emergence weight	Ongoing Current			Idaho Department of Fish and Game, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	Linked to other actions
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	1	3.2.4	Ground squirrel monitoring - monitor overwintering survival	Not Started			Idaho Department of Fish and Game, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	Linked to other actions
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	1	3.2.5	Ground squirrel monitoring - determine sex ratios and age structure	Ongoing Current			Idaho Department of Fish and Game, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	Linked to other actions

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Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	1	3.2.6	Ground squirrel monitoring - monitor reproduction	Not Started			Idaho Department of Fish and Game, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	Linked to other actions
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	2	3.3.1	Ground squirrel surveys - establish protocols	Ongoing Current	FY 2000 - FY 2004		Idaho Department of Fish and Game, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	Looking for new populations
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	2	3.3.1.1	Ground squirrel surveys - conduct surveys	Ongoing Current	FY 2000 - FY 2004		Idaho Department of Fish and Game, U.S. Fish and Wildlife Service, Payette National Forest	Management: Planning	Internal Field Assistance, Internal Technical Assistance, Species Expert	Boise National Forest has developed a predictive habitat model to guide surveys for the species within Adams and Valley Counties. Surveys will continue annually associated with monitoring and new surveys expected for 5-year review.
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	2	3.3.2	Ground squirrel surveys - standardize reporting format	Ongoing Current	FY 2000 - FY 2004		Idaho Department of Fish and Game, U.S. Fish and Wildlife Service, Payette National Forest	Work type not yet selected	Labor type not yet selected	Looking for new populations
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	3	4.1	Establishment of an Interagency Program Coordinator	Complete	FY 2000 - FY 2004	FY 2000 - FY 2004	Idaho Department of Fish and Game, U.S. Fish and Wildlife Service, Payette National Forest	Work type not yet selected	Labor type not yet selected	FWS provides annual const-share funding to IDFG to staff Recovery Coordinator
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	1	4.2	Maintain technical working group guidance	Ongoing Current	FY 2000 - FY 2004		Idaho Department of Fish and Game, U.S. Fish and Wildlife Service, Payette National Forest	Work type not yet selected	Labor type not yet selected	Linked to Action 4.1
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	2	4.3	Develop, evaluate, and update a public outreach program and materials	Ongoing Current	FY 2000 - FY 2004		Idaho Department of Fish and Game, U.S. Fish and Wildlife Service, Payette National Forest	Work type not yet selected	Labor type not yet selected	Linked to Action 4.1
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	1	4.4	Develop and maintain central database.	Ongoing Current	FY 2000 - FY 2004		Idaho Department of Fish and Game, U.S. Fish and Wildlife Service, Payette National Forest	Work type not yet selected	Labor type not yet selected	Linked to Action 4.1; data regarding species locations maintained.

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Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	2	4.5	Assess implementation of the recovery plan and revise as necessary	Ongoing Current			Idaho Department of Fish and Game, U.S. Fish and Wildlife Service, Payette National Forest	Work type not yet selected	Labor type not yet selected	Linked to Action 4.2. 5-year review initiated in 2010, recovery plan will be evaluated through that process.
Northern Idaho ground squirrel (Spermophilus brunneus brunneus)	3	4.6	Establish ground squirrel as a PNF Management Indicator Species for grassland communities	Obsolete	FY 2000 - FY 2004	FY 2006	Idaho Department of Fish and Game, U.S. Fish and Wildlife Service, Payette National Forest	Work type not yet selected	Labor type not yet selected	It has been determined that NIDGS are not widespread or abundant enough, as well as a representative of the community, to b a realistic management indicator species. In addition, NIDGS would likely not benefit from MIS designation.